

Process Flat Conductivity-Salinity Sensor with Modbus output MBRTU-ECFLAT

SKU: MBRTU-ECFLAT

Doc No: MBRTU-ECFLAT-DS-EN-10

Introduction

MBRTU-ECFLAT is Process Flat 4-electrode type Conductivity sensor, to measure very wide range conductivity 0 - 500 mS/cm. The robust POM sensor body with 316SS electrodes allow the sensor withstand the highly corrosive environment like waste water, sea water, process water...The electrode comes with dual 1" NPT threads, a durable POM body and is submersible. Output is Modbus RTU for easily integrating with any PLC, controller, SCADA, BMS or IoT gateway.

- Wide measurement range with 4-electrode design;
- Compensation for coating and build-up
- Diagnostic for fouling detection;
- Standard ModbusRTU output;

Typical Applications

MBRTU-ECFLAT is used in monitoring of electrical conductivity or salinity in:

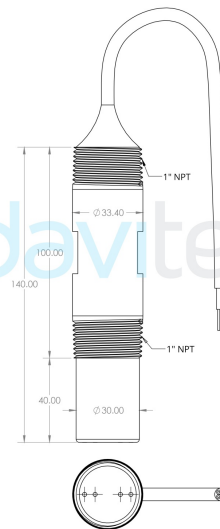
- Waste water;
- Aquaculture;
- Process liquids;
- ...

ADVANCED CONDUCTIVITY-SALINITY SENSOR
MBRTU-ECFLAT



MBRTU-ECFLAT-H1.PNG

DIMENSION DRAWING OF MBRTU-ECFLAT
(Unit: mm)



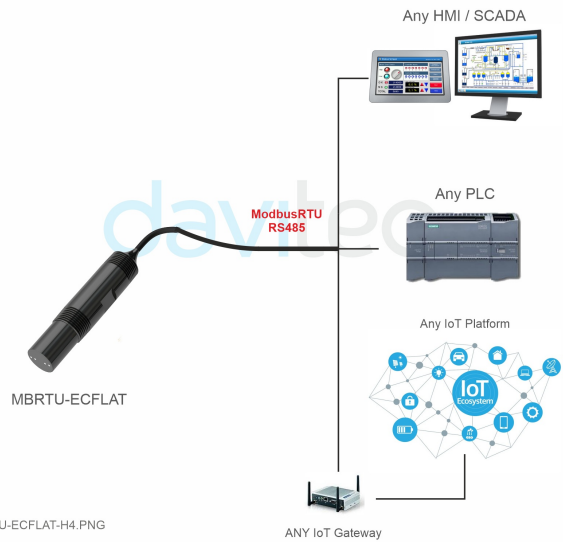
MBRTU-ECFLAT-H2.PNG

MEASURING CONDUCTIVITY-SALINITY IN WATER



MBRTU-ECFLAT-H3.PNG

CONNECT SENSORS TO any PLC, HMI, SCADA or IoT Platform via Modbus RTU



MBRTU-ECFLAT-H4.PNG

Specification

| EC SENSOR SPECIFICATION | |
|------------------------------|---|
| Sensing Technology | 4-electrode measurement with Pt100 sensor |
| Measuring range | 0 - 500 mS/cm |
| Resolution | 0.01 mS |
| Accuracy | +/- 0.1 mS |
| Response Time | T90 < 30s |
| Working process temperature | 5 .. 80 oC (compensated) |
| Working process pressure | 0 .. 100 psig |
| Process connection | 1" NPT both ends |
| Wetted parts | POM |
| Sensor Cable | 6m |
| Rating | IP68 |
| Sensor Dimension | D34 x 140 (mm) |
| Sensor net weight | < 200 grams |
| EC TRANSMITTER SPECIFICATION | |
| Inputs | 4-electrode EC sensor |
| Output | RS485, ModbusRTU protocol, max 19200 baud |
| Power supply | 9..36VDC, avg. < 200mA |
| Mounting | DIN Rail |

| | |
|---------------------|-----------------------------|
| Working temperature | -40 .. 85 oC |
| Working humidity | 0 .. 95% RH, non-condensing |
| Housing | Engineered Plastic |
| Ingress Protection | IP20 |
| Dimension | 93 x 40 (mm) |
| Net weight | <200 grams |

Ordering Code

| Item code | Descriptions |
|---|--|
| MBRTU-ECFLAT-K10 | ADVANCED CONDUCTIVITY-SALINITY SENSOR, 4-ELECTRODES FLAT TYPE, IP68, K=10, 1" NPT SUBMERSIBLE, MODBUSRTU RS485 OUTPUT, 9-36VDC, 6M CABLE |
| Accessories | |
| RS485-FM12-USB-1 | RS485 FEMALE M12 4-PIN, CODING A TO USB CABLE WITH POWER ADAPTER 12VDC/2.0A FOR CONFIGURATION |
| * Configuration cable for pH sensor, Windows' software is free. Contact our sales for more information. | |

🚩 Link to download datasheet: <https://filerun.daviteq.com/wl/?id=RqiwTGLrMVmBgTiYK2mVPNleyICPn0N4>

🚩 Link for manual:

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